BUTTERFLIES IN NORTH-EAST GREECE 2 (4 - 11 MAY 1995)

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Introduction

IN LATE July/early August 1994, I surveyed butterflies on Mount Falakro, Mount Vrontous and in the foothills of Mount Orvilos in north-east Greece (Wakeham-Dawson, 1995). In order to further investigate the distribution and abundance of butterfly species in this region, I returned to continue the survey in May 1995. The current paper provides information on 52 species identified during the visit.

Areas surveyed

I visited Mount Vrontous, north of Serres on 4 May. The weather was overcast, there was some rain and the temperature was about 15°C. The roadsides, which had been dry and brown during the previous visit, were rich with colourful flowers. However, there were few butterflies flying and once above 1500 metres, the mountain was still very wintry, with patchy snow and the beech *Fagus* trees still in tight bud. This was visibly true of the other mountains in the region (Menikio, Falakro, Pangeo), so it was clear that high altitude butterflies were unlikely to emerge for at least another two weeks.

Using Drama as a base, I therefore concentrated on lower areas. I visited the foothills to the south of Mount Falakro on 5 May. The weather was cool and the sunshine infrequent. In the kermes oak (*Quercus coccifera*) maquis between 400 and 600 metres, *Colias crocea**, *Issoria lathonia*, *Coenonympha pamphilus*, *Polyommatus icarus* and *Glaucopsyche alexis* were among the most common species active in warmer, sheltered gullies. A few male *Cupido osiris* and *Pseudophilotes baton schiffermuelleri* were also present. A single male *Parnalius polyxena* was seen flying close to the ground.

On 6 May, I drove south to the low hills (c200 metres) around Amphipolis, where kermes oak maquis and rough pasture were interspersed with small fields of cereals. Herbicide use in these fields was evidently minimal, as they were rich in wild arable plant species such as pheasant's-eye *Adonis annua*, which constitute important food sources for a range of invertebrates.

Bladder senna *Colutea arborescens* was common and in full-flower, with a few bushes already showing bladder-like pods. This is the larval foodplant of *Iolana iolas* (*vide* Stempffer, 1966). No butterflies were on the wing until noon, when the sun came out. A large, blue butterfly came racing over the scrub with the characteristic rapid twisting flight of *Iolana iolas*. Later three

^{*} Authors of the scientific names of butterflies mentioned in the text of this paper may be found in Appendix 1.

other male *iolas* were seen patrolling around the bladder senna. No females were seen. A number of species including male *Callophrys rubi* flew around the kermes oaks. Other Polyommatinae included *Celastrina argiolus*, *Glaucopsyche alexis*, *Agrodiaetus thersites*, *Polyommatus icarus* and *Pseudophilotes baton schiffermuelleri*. A robber fly (Asilidae) was seen flying past holding a male *Glaucopsyche alexis*.

Four Hesperid species were present in grassy areas: *Pyrgus malvae*, *P. sidae*, *Carcharodus alceae* and *Carcharodus orientalis*. As the temperature rose *Pandoriana pandora* and *Limenitis reducta* appeared. A pair of the latter species were mating whilst in flight. A number of Pierid species including *Leptidea sinapis* and *Euchloe simplonia* were also present. However, there was no sign of *Parnalius cerisy* or *Heodes ottomanus* which Dacie *et al.* (1970) reported from this area.

In the evening of 6 May there was a rain storm over Drama and from then on the weather improved providing sunshine and temperatures of up to 30°C for the rest of the week. On 7 May I drove around the eastern flank of Mount Falakro, through beech and birch *Betula* woodland to 1000 metres. Butterflies seen here included *Scolitantides orion* basking on rocks by the roadside and worn (hibernated) *Gonepteryx farinosa*. On 8 May I drove south around Mount Pangeo to Kavala and back to Drama via Phillipi. It was very hot and the journey unrewarding in butterflies.

The warmer weather prompted a journey around the western side of Mount Falakro and up to c1600 metres on 9 May. On rocky slopes at c800 metres, *Artogeia ergane* were flying and three partially worn male *Anthocharis gruneri*. Above 1500 metres it was cold and snow still lay in some areas. In the afternoon, I drove back to the south side of Mount Falakro and walked up a stream valley (c600 metres). This valley was as rich in species as it had been in July/August. A female *Parnalius polyxena* was observed laying round, pale-cream coloured eggs singly on the underside of the leaves of round-leaved birchwort *Aristolochia rotunda*. Male *Melitaea phoebe*, *M. cinxia* and *Clossiana euphrosyne* were present, together with male *Lysandra bellargus*, male *Aricia anteros* and *Scolitantides orion* of both sexes. Single individuals of worn, hibernated *Nymphalis antiopa* (male), *N. polychloros* (female) and *Libythea celtis* (male) were seen, as were a few *Leptidea sinapis* and *Hamearis lucina*.

Six Hesperid species were present in the stream valley: *Pyrgus malvae*, *P. armoricanus*, *Spialia orbifer*, *Carcharodus alceae*, *C. orientalis* and *Erynnis tages*. The first three of these species are superficially similar, and can be confused when on the wing or even in a net. Examination of the male genitalia (Fig. 1) allows clear identification of dead specimens, while identification of live ones is possible by considering the ground-colour and white markings on the underside of the hind-wing (Fig. 2).

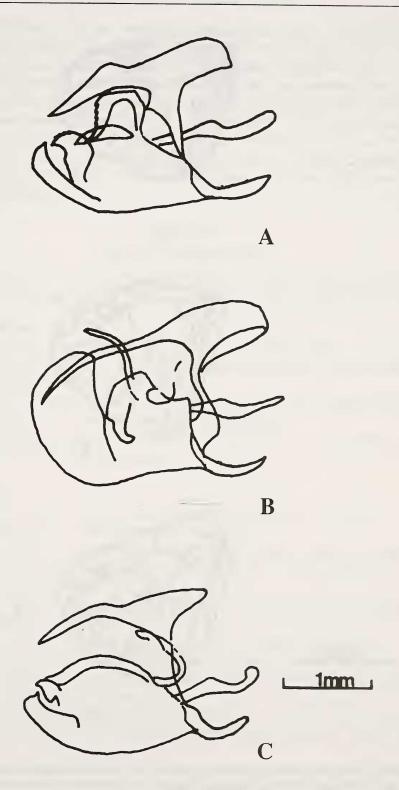
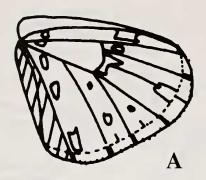
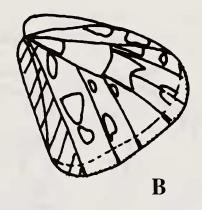
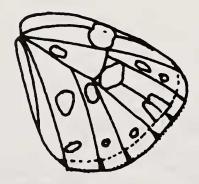


Figure 1. The male genitalia (lateral view) of (A) *Pyrgus malvae*, (B) *P. armoricanus* and (C) *Spialia orbifer* from north-east Greece in May 1995.







5mm

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Figure 2. Underside hind-wing pattern of male (A) *Pyrgus malvae* (ground colour: grey brown or red-brown), (B) *P. armoricanus* (ground colour: yellowish-brown) and (C) *Spialia orbifer* (ground colour: red-brown) from north-east Greece in May 1995. Females similar.

On 10 May I drove south to Thessalonika across the Cholomon mountains. Many of the species already seen were flying. In low (<100 metres) farmland just north of the Cholomons, *Parnalius cerisy* were common, with both male and females on the wing. In a shaded river gully, birchwort *Aristolochia clematitis* was growing under scrub bushes. This is a larval foodplant of *Parnalius cerisy* (vide Ackery, 1975), but I found no eggs. The adult butterflies, which were very common in this area, had the same characteristic pungent smell as the *Aristolochia clematitus*, suggesting they had fed on it as larvae. *Parnalius polyxena* were also flying here, but were uncommon.

Appendix 1.

List of species recorded

Nomenclature is based on Higgins & Riley (1980), except for species marked with an asterisk (*), the names of which follow Ackery (1975).

Papilionidae

Papilio machaon L. – Uncommon, Amphipolis at c200 metres.

Iphiclides podalirius L. – Widespread and common up to 900 metres in maquis and woodland.

Parnalius polyxena* D. & S. – Widespread, but never common. Mount Falakro and Cholomon mountains below 600 metres.

P. cerisy* Godart. – Locally common in farmland at low level c100 metres, north of the Cholomon mountains.

Pieridae

Pieris brassicae L. - Widespread below 600 metres, but not common.

Artogeia rapae L. - Widespread and common.

A. mannii Mayer - Local and uncommon, Mount Falakro below 600 metres.

A. ergane Geyer – Locally common on rocky slopes between 600 and 900 metres, Mount Falakro.

Pontia daplidice L. – Uncommon below 200 metres in Cholomon mountains.

Euchloe simplonia Freyer – Common below 600 metres near the coast.

Anthocharis cardamines L. – Widespread and common to 1000 metres.

A. gruneri H.-S. – Local and uncommon over rocky slopes below beech woods at 900 metres, Mount Falakro.

Colias crocea Fourc. Widespread and common.

C. australis Verity – Local and uncommon, Mount Falakro at below 800 metres.

Gonepteryx farinosa Zell. L. – Widespread, but not common on Mount Falakro.

Leptidea sinapis L. - Widespread and common.

Lycaenidae

Callophrys rubi L. -Locally common in scrub and woodland to 800 metres.

Lycaena phlaeas L. – Widespread, common.

Cupido osiris Meigen – Local, uncommon in Maquis at c500 metres, Mount Falakro, Cholomon Mountains.

Celastrina argiolus L. – Local and uncommon, Amphipolis and Mount Falakro.

Glaucopsyche alexis Poda - Widespread and common.

Iolana iolas Ochs. - Local and uncommon at Amphipolis.

Pseudophilotes baton schiffermuelleri Hemming – Locally common, Mount Falakro, Amphipolis.

Scolitantides orion Pallas – Local, uncommon, Mount Falakro to 800 metres. *Aricia agestis* D. & S. – Widespread and common.

A. anteros Freyer – Local and uncommon, Mount Falakro at 600 metres.

Agrodiaetus thersites Cantener – Local and uncommon at Amphipolis.

Lysandra bellargus Rott. – Local and uncommon, Mount Falakro.

Polyommatus icarus Rott. - Widespread and common.

Riodinidae

Hamearis lucina L. – Local and uncommon, Mount Falakro to 800 metres.

Libytheidae

Libythea celtis Laich. - A single, hibernated male, Mount Falakro.

Nymphalidae

Limenitis reducta Stdgr. - Local, uncommon at Amphipolis.

Nymphalis antiopa L. – A single hibernated male, Mount Falakro.

N. polychloros L. – A single hibernated female, Mount Falakro.

Inachis io L. - Widespread.

Vanessa atalanta L. - Widespread.

Cynthia cardui L. - Widespread to 1600 metres.

Aglais urticae L. - Widespread.

Pandoriana pandora D. & S. - Widespread and common.

Issoria lathonia L. - Widespread and very common.

Clossiana euphrosyne L. – Local and uncommon, Mount Falakro.

Melitaea cinxia L. - Widespread and common.

M. phoebe D. & S. – Locally common, Mount Falakro.

Satyridae

Coenonympha pamphilus L. - Widespread and common.

Lasiommata megera L. - Widespread and common.

Hesperiidae

Pyrgus malvae L. – Widespread.

P. armoricanus Oberthur – Widespread.

P. sidae Esper – Local and uncommon, Amphipolis.

Spialia orbifer Hb. – Locally common, Mount Falakro.

Carcharodus alceae Esper – Local and uncommon, Amphipolis and Mount Falakro.

C. orientalis Reverdin – Local and uncommon, Amphipolis and Mount Falakro.

Erynnis tages L. - Widespread and common.

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Lomaspilis marginata (L.) (Lep.: Geometridae) in November

A fresh male of the common form *discocellaris* Strand (normal, plus isolated spot in forewing cell) attended my garden m.v. light on 9.xi.1995 – the second mild night following a week of anticyclonic weather with cold nights.

Although B. Skinner (1984, *Moths of the British Isles*. Viking) and C.W. Plant (1993, *The Larger Moths of the London Area*. LNHS) both cite the time of appearance of this moth as June and July, here in Dartford it usually continues until mid-August. In 1995, noted for its long, hot summer, it failed to be observed in August; the previous occasion when this occurred being 1976, also remembered for the long, hot summer. It is usually seen here also in May, and in 1992 was noted as early as 30 April. In 1975 a specimen was seen as late as 31 August.

Newman and Leeds (1913, Text Book of British Butterflies and Moths) state that the pupae of L. marginata may lie over for more than one winter, and from experience I have found that in other species occasional individuals which do not emerge in the first year are more liable to mistime their eventual emergence. Perhaps this November specimen is one of their number, and not to be considered a member of a token second generation?

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